

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

Claims 4, 12 and 16 have now been canceled. New Claim 22 has been introduced.

Claims 1, 3, 6-9, 13-15 and 17-22 are therefore active in the application.

As previously described, the invention is directed to an operating information control system of a construction machine provided with a wireless radio having a limited range (e.g., low power wireless radio). In accordance with the invention, a receiving device causes transmission of the operating information from the construction machine to the receiving device upon the determination that the construction machine is within a transmission permissible area related to the limited range of the wireless radio. That is, the transmission controller comprises means for transmitting the operating information to the receiving device through the wireless radio when it is determined that the construction machine is within a transmission permissible area related to the limited range of the wireless radio.

For example, referring to Figure 6 of the present application, before transmitting the operating information stored on the construction machine (steps S2-S3), it is first determined whether the construction machine has passed into a transmission permissible area which is within the limited range of the wireless radio, e.g., whether the construction machine passed through a gate of the base station (step S1). Thus, in this example the operating information can be read in advance of the actual return of the construction machine, but by using only a low power wireless radio and without the need for a costly satellite or commercial network link.

Applicants had pointed out that there is no teaching for the claimed features in any combination of Imanishi et al, Yamamoto et al and Kageyama. In response, the Examiner has withdrawn the rejections based upon Imanishi et al. and Yamamoto et al. in view of

Kageyama, but has maintained the rejection based upon Imanishi et al. in view of Schubert et al. and Yamamoto et al. in view of Schubert et al.

Claims 1, 9 and 15 have therefore been amended to recite that the first receiving device is provided in a base station, and that the transmission controller comprises means for transmitting the operating information to the first receiving device through the wireless radio when the means for determining determines that the construction machine is within a transmission permissible area related to the limited range of the wireless radio *when the construction machine returns to the base station*. This is not taught by any combination of the prior art.

As previously described, Imanishi et al. discloses that an information management controller 1 is provided on a construction machine and sends stored data to a monitoring station 19, but has no description about the manner in which the stored data is sent. Yamamoto also lacks a description of determining whether a construction machine is within a permissible region which is related to the limited range of the wireless radio when the construction machine returns to the base station.

The Examiner has thus relied upon Schubert et al., particularly the description that the receiver is activated when the fob is determined to be located within a desirable proximity to the work vehicle (column 12, lines 37-40). However, there is no description in Schubert et al. for transmitting operating information when the construction machine returns to a base station. Instead, the fob of Schubert et al. is similar to a wireless remote control transmitter used for automobiles and only transmits a particular control signal in response to the pressing of a push button for as long as the button is held down. This has no relation to a determination that the construction machine returns to the base station, and so Schubert et al. could not provide such a teaching for use in the system of either of the primary references.

Claims 1, 9 and 15, together with their dependent claims, therefore now define over any combination of the above references.

New Claim 22 recites a first receiving device provided on a movable body external to the construction machine and a transmission controller comprising means for transmitting operating information to the first receiving device through a wireless radio when it is determined that the construction machine is within a transmission permissible area related to the limited range of the wireless radio, and when the movable body having the first receiving device travels near the construction machine. This is also not taught in the cited references, and so the claims define over any combination of the above references.

Applicant therefore believes that the present application is in a condition for allowance and respectfully solicits an early Notice of Allowability.

Respectfully submitted,


OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)
RTP:smi

I:\ATTY\RTP\214039US-AM.DOC



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Robert T. Pous
Attorney of Record
Registration No. 29,099

James D. Hamilton
Registration No. 28,421